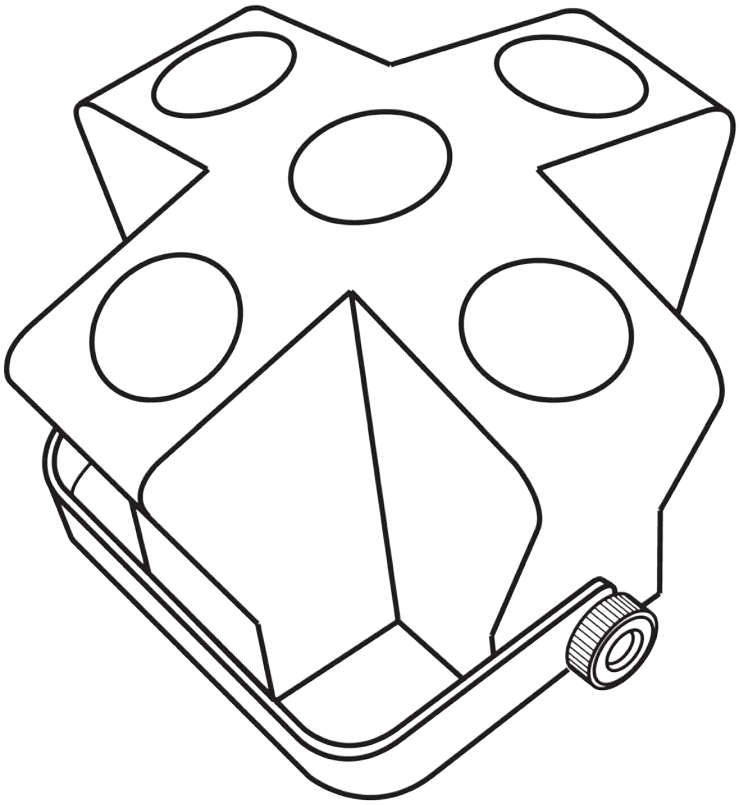
www.americanmusical.com

Circus

User Manual



CHAUVET®

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1. BEFORE YOU BEGIN

What is Included

- 1 x Circus
- 1 x Power Cord
- 1 x Warranty Card
- 1 x User Manual

Unpacking Instructions

Immediately upon receiving this product, carefully unpack it and check the container in which you received it. Make sure that you have received all the parts indicated above and that they are all in good condition. If the material inside the container (this product and any other accessory included with it) appears damaged from shipping, or if the container shows signs of mishandling, notify the shipper immediately. In addition, retain the container and all the packing material for inspection. See the *Claims* section in the *"Technical Information"* chapter.

Text Conventions

Convention	Meaning
<Menu>	A key to be pressed on the fixture's control panel
1~512	A range of values
50/60	A set of values of which only one can be chosen
Settings	A menu option not to be modified (for example, showing the operating mode/current status)
Menu > Settings	A sequence of menu options to be followed
ON	A value to be entered or selected

Icons

Icon	Meaning
	Critical installation, configuration, or operation information. Failure to comply with this information may render the fixture partially or completely inoperative, cause damage to the fixture, or cause harm to the user.
	Important installation or configuration information. Failure to comply with this information may prevent the fixture from functioning correctly.
	Useful information.

Disclaimer

The information and specifications contained in this document are subject to change without notice. CHAUVET® assumes no responsibility or liability for any errors or omissions that may appear in this manual.

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Author	Editor	Date
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Product at a Glance

Use on Dimmer	⊘	Auto Programs	✓
Outdoor Use	⊘	Auto-ranging Power Supply	✓
Sound Activated	✓	Replaceable Fuse	✓
DMX	✓	User Serviceable	⊘
Master/Slave	✓	Duty Cycle	⊘

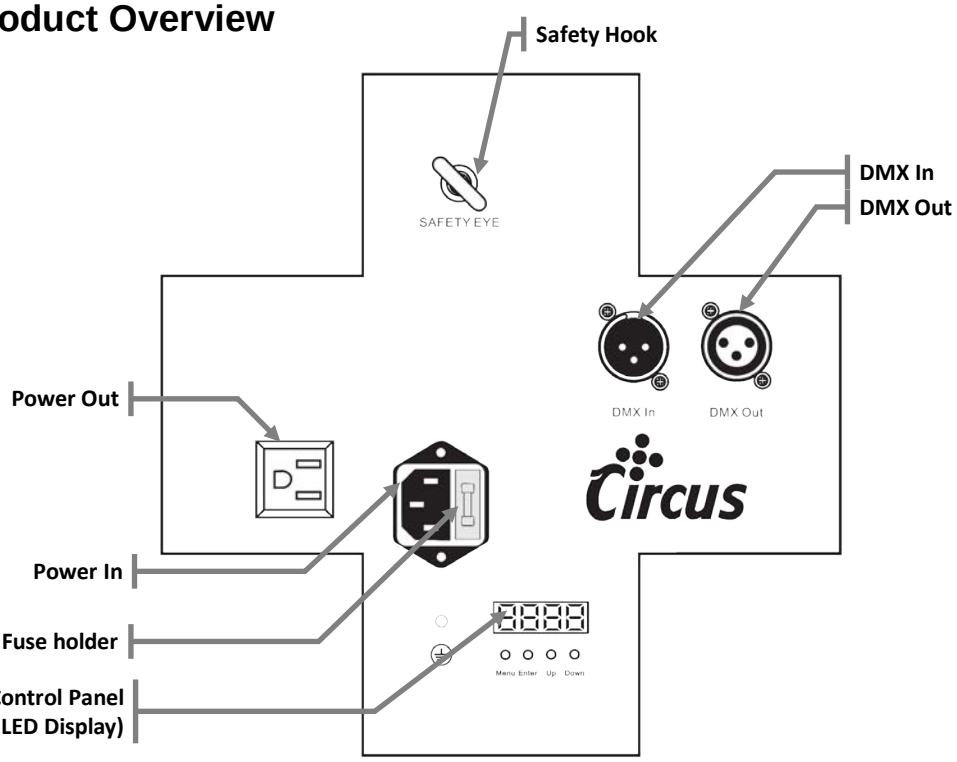
Safety Notes

Please read the following notes carefully because they include important safety information about the installation, usage, and maintenance of this product.

- Keep this User Manual for future consultation. If you sell this product to another user, be sure that they also receive this document.
- Always make sure that the voltage of the outlet to which you are connecting this product is within the range stated on the decal or rear panel of the fixture.
- This product is for indoor use only! To prevent risk of fire or shock, do not expose this fixture to rain or moisture.
- Make sure there are no flammable materials close to the unit while operating.
- Always install this product in a location with adequate ventilation, at least 20 in (50 cm) from adjacent surfaces.
- Be sure that no ventilation slots on the unit's housing are blocked.
- Always disconnect this product from the power source before cleaning it or replacing the fuse.
- Make sure to replace the fuse with another of the same type and rating.
- If mounting this product overhead, always secure it to a fastening device using a safety cable.
- The maximum ambient temperature (Ta) is 104° F (40° C). Do not operate this product at higher temperatures.
- In the event of a serious operating problem, stop using the unit immediately.
- Never try to repair this product. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center.
- Never connect this product to a dimmer pack.
- Make sure the power cord is not crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Never carry a fixture from the power cord or any moving part. Always use the hanging/mounting bracket or the handles.
- Always avoid direct eye exposure to the light source when this fixture is on.

2. INTRODUCTION

Product Overview



3. SETUP

AC Power

This product has an auto-ranging power supply and it can work with an input voltage range of 100~240 VAC, 50/60 Hz.To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specifications chart. A fixture's listed current rating indicates its average current draw under normal conditions.

Always connect this product to a protected circuit (circuit breaker or fuse), making sure that it has an appropriate electrical ground to avoid the risk of electrocution or fire.

Never connect this product to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel serves only as a 0 to 100% switch.

Fuse Replacement

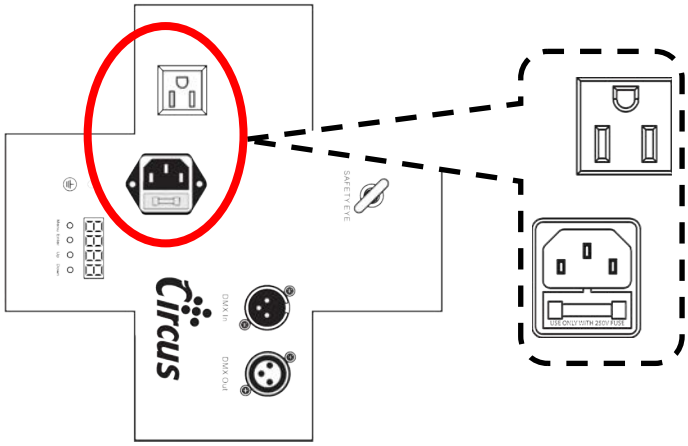
Disconnect this product from the power outlet before replacing the fuse.

1) Wedge the tip of a flat-head screwdriver into the slot of the fuse holder and pry it out of its housing.
2) Remove the blown fuse from its holder and replace it with a fuse of the exact same type and rating.
3) Insert the fuse holder back in its place, and reconnect power.

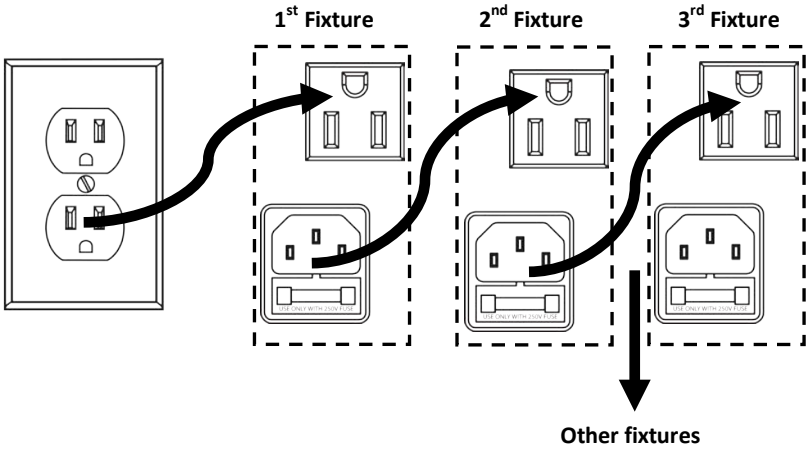
Always replace a blown fuse with a good fuse of the same type and rating.

Power Linking

This fixture provides power linking via the Edison outlet located in the back of the unit.



Power Linking Diagram



You can power link up to 26 Circus units on 120 VAC or up to 40 Circus units on 230 VAC.

The power linking diagram shown above corresponds to the North American version of this product ONLY! If using this product in other markets, you must consult with the local CHAUVET® distributor as power linking connectors and requirements may differ in your country or region.

Mounting

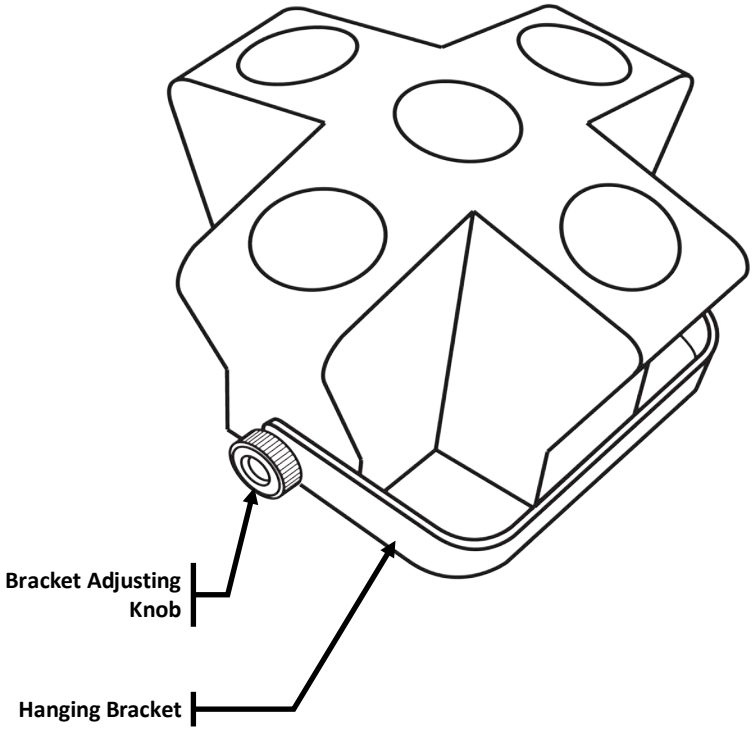
Orientation

The Circus may be mounted in any position, provided there is adequate room for ventilation around it.

Rigging

Be sure that the structure onto which you are mounting this product can support its weight. Please see the "*Technical Specifications*" section of this manual for weight information.
Make sure to mount the fixture securely to a rigging point, whether an elevated platform or a truss.
When rigging this product onto a truss, you should use a mounting clamp of appropriate weight capacity. The bracket has a 13 mm hole, which is appropriate for this purpose.
When mounting this product overhead, always use a safety cable.
Before deciding on a location for this product, always make sure that it will be easy to access the unit for maintenance and programming purposes.
When power linking multiple fixtures, you must always consider the length of the power linking cable and mount the fixtures close enough for the cable to reach them.
The bracket knobs allow for directional adjustment when aiming the fixture to the desired angle. Only loosen or tighten the bracket knobs using your bare hands. Using tools could damage the knobs.

Mounting Diagram

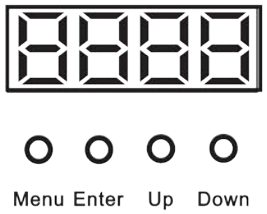


4. OPERATION

Control Panel Operation

To access the control panel functions, use the four buttons located underneath the display.

Button	Function
<MENU>	Press to find an operation mode or to back out of the current menu option
<ENTER>	Press to activate a menu option or a selected value
<UP>	Press to scroll up the list of options or to find a higher value
<DOWN>	Press to scroll down the list of options or to find a lower value



Menu Map

Mode	Programming Steps		Description
DMX Address	**d.001~512**		Selects the DMX starting address
Standalone Slave	**SLAu**		Slave operating mode
Standalone Sound	**SOUn**		Sound active standalone mode
Microphone Sensitivity	**SE.00~31**		Microphone sensitivity (works in sound active mode only)
Standalone Static	**C.L.r-**		Red
	C.L.g-		Green
	C.L.b-		Blue
	C.L.y-		Amber
	C.L.u-		White
Software Version	**v-#.#**		Displays the software version installed
Standalone Auto-configure	***AUTO***	**N000~100**	Program progression time (slow~fast)
		SP00~99, FL	Run speed (slow~fast)
		SP00~99	Strobe rate (off, slow~fast)

Configuration (DMX)

Set this product in DMX mode to control it with a DMX controller.

1) Connect this product to a suitable power outlet.
2) Turn this product on.
3) Connect a DMX cable from the DMX output of the DMX controller to the DMX input socket of this product.

Starting Address

When selecting a starting DMX address, always consider the number of DMX channels the selected DMX mode uses. If you choose a starting address that is too high, you could restrict the access to some of the fixture's channels.

The Circus uses up to 3 DMX channels in its single DMX mode, which defines the highest configurable address to **510**. If you are not familiar with the DMX protocol, download the DMX Primer from www.chauvetlighting.com.

To select the starting address, do the following:

1) Press **<MENU>** repeatedly until **d.000~512** shows on the display.
2) Press **<ENTER>**.
3) Use **<UP>** or **<DOWN>** to select the starting address (**000~512**).
4) Press **<ENTER>**.

DMX Channel Assignments and Values

Channel	Function	Value	Setting
1	**Program/Mode**	000 ⇔ 000	No function
		001 ⇔ 005	Automatic 1
		006 ⇔ 011	Automatic 2
		012 ⇔ 017	Automatic 3
		018 ⇔ 023	Automatic 4
		024 ⇔ 029	Automatic 5
		030 ⇔ 035	Automatic 6
		036 ⇔ 041	Automatic 7
		042 ⇔ 047	Automatic 8
		048 ⇔ 053	Automatic 9
		054 ⇔ 059	Automatic 10
		060 ⇔ 065	Automatic 11
		066 ⇔ 071	Automatic 12
		072 ⇔ 077	Automatic 13
		078 ⇔ 083	Automatic 14
		084 ⇔ 089	Automatic 15
		090 ⇔ 095	Automatic 16
		096 ⇔ 101	Automatic 17
		102 ⇔ 107	Automatic 18
		108 ⇔ 113	Automatic 19
		114 ⇔ 119	Automatic 20
		120 ⇔ 125	Automatic 21
		126 ⇔ 131	Automatic 22
		132 ⇔ 137	Automatic 23
		138 ⇔ 143	Automatic 24
		144 ⇔ 149	Automatic 25
		150 ⇔ 155	Automatic 26
		156 ⇔ 161	Automatic 27
		162 ⇔ 167	Automatic 28
		168 ⇔ 173	Automatic 29
		174 ⇔ 179	Automatic 30
		180 ⇔ 185	Automatic 31
		186 ⇔ 191	Automatic 32
		192 ⇔ 197	Automatic 33
		198 ⇔ 203	Automatic 34
		204 ⇔ 209	Automatic 35
		210 ⇔ 215	Automatic 36
		216 ⇔ 221	Automatic 37
		222 ⇔ 227	Automatic 38
		228 ⇔ 233	Automatic 39
		234 ⇔ 239	Automatic 40
		240 ⇔ 245	Automatic 41
		246 ⇔ 251	Automatic 42
		252 ⇔ 255	Sound-active
2	**Run Speed** (When running programs)	000 ⇔ 255	0~100%
	Sound Sensitivity (When in Sound Active Mode)		
3	**Strobe Speed** (Only for programs)	000 ⇔ 255	0~100%

Configuration (Standalone Modes)

Set this product in one of the standalone modes to control it without a DMX controller.

1) Connect this product to a suitable power outlet.
2) Turn this product on.

Never connect a fixture that is operating in any standalone mode, whether Static, Automatic, or Sound to a DMX daisy chain connected to a DMX controller. This is because fixtures in standalone mode may transmit DMX signals that could interfere with the DMX signals from the controller.

Standalone Static

To enable the Standalone Static mode, do the following:

1) Press **<MENU>** repeatedly until **CL-X** shows on the display.
2) Use **<UP>** or **<DOWN>** to select a color (**CL.r**, **CL.g**, **CL.b**, **CL.y**, or **CL.u**).

The fixture will illuminate in the chosen color until re-configured or turned off.

Sound-Active Mode

To enable the Sound-Active mode, do the following:

1) Press **<MENU>** repeatedly until **SOUn** shows on the display.
2) Press **<ENTER>**.
3) Turn the music on.
4) Press **<MENU>** repeatedly until **SE.00~31** shows on the display.
5) Use **<UP>** or **<DOWN>** to adjust the microphone sensitivity (**S_ _1~S100**) until the fixture starts reacting to the beat of the music.

The fixture will only respond to the low frequencies of the music (bass and drums).

Auto Selection

To enable the Auto Selection mode, follow the instructions below:

1) Press **<MENU>** repeatedly until **Pr.XX** shows on the display.
2) Press **<ENTER>**.
3) Use **<UP>** or **<DOWN>** to select the desired program.
4) Press **<ENTER>**.

The playback speed is not adjustable in this mode.

Auto Configure

This product has 42 built in light shows (auto programs). In this mode, it will cycle through each of those programs.

To enable the Auto Configure mode, follow the instructions below:

1. Plug the fixture into power.
2. Press **<MENU>** until **AUTO** appears on the display.
3. Press **<ENTER>** to scroll until you reach **n.*****.
4. Use **<UP>** or **<DOWN>** to adjust the time the light show runs (**000~100**) before proceeding to the next.
5. Press **<ENTER>** until you reach **SP****.
6. Use **<UP>** or **<DOWN>** to adjust the run speed between **00~99** or **FL** (full run speed).
7. Press **<ENTER>** until you reach **SF****.
8. Use **<UP>** or **<DOWN>** to adjust the strobe speed between **00~99** or **FL** (full strobe speed).
9. Press **<ENTER>**.

n.000~10:	**Modifies the light show time progression**
SP.00~99, FL:	**Modifies the run speed**
SF.00~99, FL:	**Modifies the strobe speed**

Master/Slave Mode

This mode allows a single Circus unit (the “master”) to control the actions of one or more Circus units (the “slaves”) without the need of a DMX controller. The master unit will be set to operate in either Auto or Sound Active mode, while the slave units will be set to operate in Slave Mode. Once set and connected, the slave units will operate in unison with the master unit.
Configure the units as indicated below.

Slave units:

1) Press **<MENU>** repeatedly until **SLAu** shows on the display.
2) Press **<ENTER>**.
3) Connect the DMX input of the first slave unit to the DMX output of the master unit.
4) Connect the DMX input of the subsequent slave units to the DMX output of the previous slave unit.
5) Finish setting and connecting all the slave units.

Master unit:

1) Set the master unit to operate in either Automatic or Sound mode, as previously indicated.
2) Make the master unit the first unit in the DMX daisy chain.

- ***Configure all the slave units before connecting the master unit to the DMX daisy chain.***
- ***Never connect a DMX controller to a DMX string configured for Master/Slave operation because it may interfere with the signals from the master unit.***
- ***Do not connect more than 31 slave units to the master unit.***

5. TECHNICAL INFORMATION

Maintenance

Dust build up reduces light output performance and can cause overheating. This can lead to reduction of the light source's life or mechanical wear. To maintain optimum performance and minimize wear, you should clean your lighting fixtures at least twice a month. However, be aware that usage and environmental conditions could be contributing factors to increase the cleaning frequency.
To clean this fixture, follow the instructions below:

- Unplug the fixture from power.
- Wait until the fixture is cold.
- Use a vacuum (or dry compressed air) and a soft brush to remove dust collected on the external surface.
- Clean all lenses surfaces with a mild soap solution, ammonia-free glass cleaner, or isopropyl alcohol.
- Apply the solution directly to a soft, lint free cotton cloth or a lens cleaning tissue.
- Softly drag any dirt or grime to the outside of the lens.
- Gently polish the lenses until they are free of haze and lint.

Always dry the lenses carefully after cleaning them.

Troubleshooting

Symptom	Possible Cause	Possible Action
Circuit breaker or fuse keeps blowing	Excessive load on the circuit	Make sure that the total load does not exceed 80% of the breaker or fuse nominal current
	Short circuit along the power lines	Check the power lines and power cords
Product does not power up	No energy on power outlet	Check power outlet Change to another outlet
	Loose or damaged power cord	Check the power cord
	Blown fuse	Replace blown fuse with a good one of the same type and rating
	Internal problem	Send product for repair
Fixture does not respond to DMX	Wrong starting address on the fixture	Set the correct starting address on the fixture Use the right fader(s) on the controller
	Wrong DMX personality on the fixture	Set the correct DMX fixture's personality Assign the faders accordingly
	Wrong polarity setting on the DMX controller	Change the signal polarity on the controller
	Loose or damaged DMX cable	Check the DMX cable before the faulty unit
	Internal problem	Send product for repair
Intermittent DMX Problems	Signal cables are not DMX compatible	Replace non DMX cables with true DMX cables
	Interference with AC or radio signals	Keep DMX cables away from AC wires or radio equipment
	DMX cable too long	Install an optically coupled DMX amplifier right before the fixture with intermittent problems
	Too many fixtures connected	Install an optically coupled DMX amplifier after unit #32
	Terminator not connected	Install a terminator.

Contact CHAUVET® Technical Support if these solutions do not work.

Returns

The user must send the merchandise prepaid, in the original box, and with its original packing and accessories. CHAUVET® will not issue call tags.
Call CHAUVET® and request a Return Merchandise Authorization (RMA) number before shipping the fixture. Be prepared to provide the model number, serial number, and a brief description of the cause for the return.
The user must clearly label the package with a Return Merchandise Authorization (RMA) number. CHAUVET® will refuse any product returned without an RMA number.

DO NOT write the RMA number directly on the box. Instead, write it on a properly affixed label.

Once you have received the RMA number, please include the following information on a piece of paper inside the box:

- Your name
- Your address
- Your phone number
- The RMA number
- A brief description of the problem

Be sure to pack the fixture properly. Any shipping damage resulting from inadequate packaging will be the customer's responsibility. As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

CHAUVET® reserves the right to use its own discretion to repair or replace returned product(s).

Claims

The carrier is responsible for any damage incurred during shipping to this product or any part that shipped with it. Therefore, if the received merchandise appears to have damages caused during shipping, the customer must submit the damage report and any related claims with the carrier, not CHAUVET®. The customer must submit the report upon reception of the damaged merchandise. Failure to do so in a timely manner may invalidate the customer's claim with the carrier.
For other issues such as missing components or parts, damage not related to shipping, or concealed damage, the customer must make claims to CHAUVET® within 7 days of receiving the product.

Contact Us

World Headquarters

CHAUVET®

General Information

Address:	5200 NW 108th Avenue Sunrise, FL 33351
Voice:	(954) 929-1115
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Technical Support

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Email:	tech@chauvetlighting.com

World Wide Web

www.chauvetlighting.com

United Kingdom & Ireland

CHAUVET® Europe Ltd.

General Information

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Technical Support

Email:	uktech@chauvetlighting.com

World Wide Web

www.chauvetlighting.co.uk

6. TECHNICAL SPECIFICATIONS

Dimensions and Weight

Length	Width	Height	Weight
9.1 in (231 mm)	11.8 in (300 mm)	13 in (330 mm)	8.3 lbs (3.7 kg)

Note: Dimensions in inches rounded to the nearest decimal digit.

Power

Power Supply Type	Range	Voltage Selection
Switching (internal)	100~240 V, 50/60 Hz	Auto-ranging

Parameter	120 V, 60 Hz	230 V, 50 Hz
Consumption	27 W	31 W
Operating Current	0.3 A max	0.2 A max
Power Linking	26 units	40 units
Fuse	F 1 A, 250 V	F 1 A, 250 V

Power I/O	US/Worldwide	Europe
Power Input Connector	IEC	IEC
Power Output Connector	Edison	IEC
Power Cord plug	Edison (US)	Local plug

Light Source

Type	Diameter	Lifespan
LED	5 mm	50,000 hours

Color	Quantity
Red	80
Green	80
Blue	80
White	40
Amber	40

Photo Optic

Parameter	Angle
Coverage	55º

Thermal

Maximum External Temp.	Cooling System
104° F (40° C)	Convection

DMX

I/O Connectors	Connector Type	Channel Range
3-pin XLR	Sockets	3

Ordering

Product Name	Item Code	Item Number
Circus	04050078	CIRCUS

UL 1573
CSA C22.2 No. 166
E113093